

Serial No.: 10/632,345

AMENDMENTS IN THE CLAIMS:

1. (Previously presented) A simulated slot electric motor comprising:
a housing,
a rotor,
a stator having,
a magnetic flux tube,
a plurality of field windings at least partially disposed in a plurality of simulated slots, and
a plurality of electrical connections connected to the plurality of field windings configured to connect to a motor control package,
wherein the plurality of field windings are at least partially retained within the inside diameter of the magnetic flux tube.

2. (Currently Amended) ~~The simulated slot electric motor of claim 1 wherein~~
An electric motor comprising:
a housing,
a rotor,
a stator having,
a magnetic flux tube,
a plurality of field windings at least partially disposed in a plurality of slots,
and
a plurality of electrical connections connected to the plurality of field windings configured to connect to a motor control package,
wherein the plurality of field windings are at least partially retained within the inside diameter of the magnetic flux tube, and
the motor control package comprises:
a commutation control package connected to,
a power supply package, having
a thermally conductive housing,

Serial No.: 10/632,345

wherein the power supply package is secured to the thermal conductive housing configured to conduct heat away from the power supply circuit.

3. (Currently Amended) The ~~simulated slot~~ electric motor of claim 2 wherein the power supply package comprises:

a printed circuit board,
one or more transistors, and
a receptacle,

wherein the transistors are mounted to the printed circuit board in a vertical position and the transistors are secured to the thermal conductive housing, and

wherein the receptacle is configured to connect to the commutation control package.

4. (Currently Amended) The ~~simulated slot~~ electric motor of claim 2 wherein the motor control circuit comprises:

a modular power supply package, and
a modular commutation control package,

wherein the modular power supply circuit is configured to connect with the modular commutation circuit placing the modular power supply circuit and the modular communication control circuit in electrical communications.

5. (Currently Amended) The ~~simulated slot~~ electric motor of claim 4 wherein the modular power supply package is configured to mate with a plurality of modular commutation control package.

6. (Currently Amended) The ~~simulated slot~~ electric motor of claim 5 wherein the plurality of modular commutation control package comprises at least one selected from a variable speed control circuit, a fixed speed circuit, a reversing circuit, a dynamic braking circuit and a fixed variable speed circuit.

Serial No.: 10/632,345

7. (Currently Amended) The ~~simulated slot~~ electric motor of claim 4 wherein said modular commutation package is configured to mate with a plurality of modular power supply package.
8. (Currently Amended) The ~~simulated slot~~ electric motor of claim 7 wherein the plurality of modular power supply package is at least one of the following; an AC power supply, a DC power supply, a 220 volt power supply, a 120 volt power supply and/or a 36 volt power supply.
9. (Previously Presented) The simulated slot electric motor of claim 1 wherein the magnetic flux tube comprises:
 - a plurality of ribbon coils, and
 - a plurality of insulation layers,wherein the ribbon coils, separated by insulation layers, are bound together forming a generally cylindrical shape.
10. (Previously presented) The simulated slot electric motor of claim 9 wherein each ribbon coil comprises
 - a plurality of layers of magnetic flux conductive material
11. (Previously presented) The simulated slot electric motor of claim 10 wherein the magnetic flux conductive material comprises silicon steel.
12. (Previously Presented) The simulated slot electric motor of claim 1 further comprising:
 - an insulation configured to electrically isolate the field windings from the magnetic flux tube.

Serial No.: 10/632,345

13. (Previously Presented) The simulated slot electric motor of claim 1 wherein the plurality of field windings are connected in one selected from a wye and a delta configuration, and

wherein the plurality of field windings form a generally segmented arc ring sector cylindrical shape.

14-16. (Canceled)

17. (Previously Presented) A stator for an electric motor comprising:

a magnetic flux tube,

a plurality of field windings at least partially disposed in a simulated slot,

and

a plurality of electrical connections connected to the plurality of field windings configured to connect to a power source,

wherein the plurality of field windings are at least partially retained within the inside diameter the magnetic flux tube.

18. (Previously presented) The stator for an electric motor of claim 17 wherein the magnetic flux tube comprises:

a plurality of ribbon coils, and

a plurality of insulation layers,

wherein the ribbon coils, separated by insulation layers, are bound together forming a generally cylindrical shape.

19. (Previously presented) The stator for an electric motor of claim 17 wherein each ribbon coil comprises

a plurality of layers of conductive material

20. (Previously presented) The stator for an electric motor of claim 17 wherein the conductive material comprises silicon steel.

Serial No.: 10/632,345

21. (Previously presented) The stator for an electric motor of claim 17 further comprising:

an insulation configured to electrically isolate the field windings from the magnetic flux tube.

22-39. (Canceled)

40. (New) A simulated slot electric motor of claim 1, wherein the plurality of field windings are at least partially molded to an internal cylinder wall of the magnetic flux tube.

41. (New) A simulated slot electric motor of claim 40, wherein the plurality of field windings are over-molded to the internal cylinder wall of the magnetic flux tube.

42. (New) The stator for an electric motor of claim 17, wherein the plurality of field windings are at least partially molded to an internal cylinder wall of the magnetic flux tube.

43. (New) The stator for an electric motor of claim 17, wherein the plurality of field windings are over-molded to the internal cylinder wall of the magnetic flux tube.